Docket No. 210374US0

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF	:	
Laurence SEBILLOTTE-ARNAUD, et al.	:	EXAMINER: N. Ogden, Jr.
SERIAL NO: 09/903,785	:	
FILED: July 13, 2001	:	GROUP ART UNIT: 1751

FOR: CLEANSING COSMETIC COMPOSITION

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VA 22313

SIR:

Appellants submit this brief in response to the Rejection dated October 2, 2007.

REAL PARTY IN INTEREST

The real party in interest herein is L'Oréal S.A. of Paris, France.

RELATED APPEALS AND INTERFERENCES

To the best of Appellants' knowledge, there are no appeals or interferences which will directly affect or be directly affected by, or have a bearing on, the Board's decision in this appeal.

STATUS OF CLAIMS

Claims 1-9, 11-21 and 23 are rejected and on appeal. Claims 10 and 22 have been canceled.

STATUS OF AMENDMENTS

All amendments and remarks filed in this case have been entered and considered.

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1: The Invention relates to a cleansing composition (Specification at page 3, line 4), comprising:

(1) at least one foaming surfactant (Specification at page 3, line 6),

(2) at least 1 % by weight of at least one hydrophilic silica, relative to the total weight of the composition (Specification at page 3, lines 6-7),

(3) at least one oxyalkylenated compound which is a thickening agent present in a thickening effective amount (Specification at page 26, lines 1-11),

and is selected from the group consisting of: (a) polyethylene glycols having a number of ethylene oxide units greater than or equal to 800; (b) polyethylene and/or polypropylene glycol esters having the formula:

$$RCOO\text{-}(EO)_m\text{-}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or

branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen; (c) polyethylene glycol ethers having the formula

$$R\text{-}(EO)_m\text{---}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the provisos that (i) R and R' are not simultaneously hydrogen, and (ii) where either R or R' is hydrogen, the other comprises an alkyl chain comprising 12 to 22 carbon atoms, an aryl group, or mixtures thereof; (d) alkoxylated polyol fatty acid esters; (e) alkoxylated polyol fatty alcohol ethers; (f) alkoxylated glyceryl triesters of fatty acids; (g) ethoxyethylenated urethane derivatives modified with alkyl chains; and (h) mixtures thereof (Specification at page 10, line 8 through page 15, line 9), and

(4) a physiologically acceptable aqueous medium comprising at least 35 % by weight of water, relative to the total weight of the composition (Specification at page 3, line 5).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether the pending claims are obvious under 35 U.S.C. § 103 over Glenn (U.S. patent 6,277,797 or WO 96/28140).
2. Whether claim 1 fails to satisfy the written description requirement of 35 U.S.C. § 112, first paragraph.

ARGUMENT

I. The pending claims are not obvious under 35 U.S.C. § 103 over Glenn

The invention compositions require the presence of **a thickening effective amount** of at least one oxyalkylenated compound **thickening agent**. Glenn does not teach or suggest such compositions.

First, Glenn does not disclose or suggest adding the required oxyalkylenated **thickening agent** to his compositions. Instead, Glenn discloses, at col. 3, lines 5-27, polyols having at most 200 alkoxylated groups (n = 200). Glenn's polyols are used as "humectants and solutes." (See, col. 3, line 1). Nowhere does Glenn teach or suggest using his polyols to thicken his compositions.

In this regard, Appellants note that the CTFA handbook evidence of record indicates that PEG compounds having 200 ethoxylation units or less are "solvents," not thickening agents.[1] Thus, Glenn's disclosure of PEG compounds up to PEG-200 (n = 200) cannot teach or suggest the claimed thickening agents. Rather, the disclosure relates to solvents for Glenn's compositions which are expressly liquid compositions.

One skilled in the art, following Glenn, would not have been motivated to add a PEG compound which is a thickening agent in a viscosity increasing amount to yield the claimed compositions.

The significance of the requirement that the required oxyalkylenated compounds be thickening agents is demonstrated by the examples in the present specification. Comparative example 2 (pages 24-25) does not contain PEG-120 methylgluclose dioleate, an

[1] For sake of completeness, Appellants submit herewith pages 969-976 of the CTFA handbook (2000).

oxyalkylenated thickening agent, but it does contain two of Glenn's acceptable solutes/humectants, sorbitol and glycerol. (See, Glenn at col. 13, lines 14-15). This comparative composition is a "translucent liquid product like water." Thus, compositions containing only Glenn's solutes/humectants result in unacceptable products. However, when thickening agent PEG-120 methylgluclose dioleate is added, the resulting composition is a "thick translucent gel." (Example 1, pages 24-25). Thus, adding the claimed oxyalkylenated compound in a composition thickening effective amount results in a product having superior, more desirable properties, whereas adding Glenn's solutes/humectants does not.

For at least this reason Glenn neither teaches nor suggests the invention compositions.

Second, Glenn does not disclose the presence of **a thickening effective amount** of the required thickening agent. For Glenn to disclose a thickening effective amount of the required oxyalkylenated thickening agent, it would have to disclose or suggest actually thickening compositions with an oxyalkylenated compound. *See, Abbott Laboratories v. Baxter Pharmaceutical Products, Inc.,* 67 U.S.P.Q.2d 1191 (Fed. Cir. 2003)("effective amounts" are not necessarily disclosed by prior art compositions containing the claimed active ingredient; the desired effect must be achieved). Merely because Glenn suggests that oxyalkylenated compounds can be added as humectants, solutes and surfactants does not mean that it discloses or suggests thickening compositions with such compounds. *See, Abbott Laboratories.*

Based on Glenn's disclosure related to the limited purposes for which oxyalkylenated compounds could be added to his compositions, no motivation would exist for one skilled in the art to actually thicken Glenn's compositions using a thickening effective amount of an

oxyalkylenated compound. Rather, one skilled in the art would add oxyalkylenated compounds in humectant, solute and/or surfactant effective amounts. Thus, Glenn neither teaches nor suggests the required element that the oxyalkylenated compound be present in a thickening effective amount.

For this reason as well Glenn neither teaches nor suggests the invention compositions.

Third, the invention compositions require the presence of (1) at least one foaming surfactant, (2) at least 1 % by weight of at least one hydrophilic silica, **and** (3) at least one oxyalkylenated compound, wherein the oxyalkylenated compound is a thickening agent present in a composition thickening effective amount. As demonstrated in comparative examples 1-3 set forth on pages 24 and 25 of the present specification, if one of these required ingredients is missing, the resulting composition is unacceptable. In stark contrast, invention example 1 set forth on pages 24 and 25 demonstrates that compositions containing all three of the required ingredients possess superior, more desirable properties. These examples demonstrate the criticality of having all three of the required ingredients present in the same composition.

For such compositions to be obvious under 35 U.S.C. §103, Glenn must motivate or suggest to one skilled in the art to combine all three required ingredients into a single composition. Glenn, however, does not provide the necessary suggestion or motivation. In particular, Glenn does not teach or suggest adding **a thickening effective amount** of at least one oxyalkylenated compound **thickening agent** to his compositions.

For this reason as well Glenn neither teaches nor suggests the invention compositions.

Fourth, the Glenn does not teach or suggest the specific thickening agents identified in claim 23 (which excludes PEG compounds). For this reason as well Glenn neither teaches nor suggests the invention composition of claim 23.

For all of the above reasons, Glenn cannot teach or suggest the invention compositions, and no case of *prima facie* obviousness has been set forth.

II. Claim 1 satisfies the written description requirement of 35 U.S.C. § 112

The Examiner rejected claim 1 under 35 U.S.C. § 112, first paragraph, asserting that the limitation in subpart (a) requiring the polyethylene glycol to have a number of ethylene oxide units greater than or equal to 800 does not satisfy the written description requirement. This rejection is erroneous.

To satisfy the written description requirement, Appellants must convey with reasonable clarity to those skilled in the art that they were in possession of the claimed invention as of the filing date of the application. *See, Vas-Cath, Inc. v. Mahurkar,* 935 F.2d 1555, 1563-64 (Fed. Cir. 1991). The description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the Examiner to rebut the presumption. *See, In re Marzocchi,* 439 F.2d 220, 224 (CCPA 1971). Thus, the Examiner has the burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims. *See, In re Wertheim,* 541 F.2d 257, 262-63 (CCPA 1976).

Here, the Examiner has not met his burden. The present application, filed July 13 2001, discloses using thickening effective amounts of PEG thickening agents. The 2000

version of the CTFA handbook discloses that PEG-800 is a thickening agent. Based on this evidence, one skilled in the art in 2001 would understand that the present application, which discloses using PEG thickening agents, encompasses PEG-800 (a known thickening agent in 2001). No evidence to the contrary exists -- that is, no evidence exists that one skilled in the art would not recognize that PEG-800 is encompassed within the disclosure of the present application.

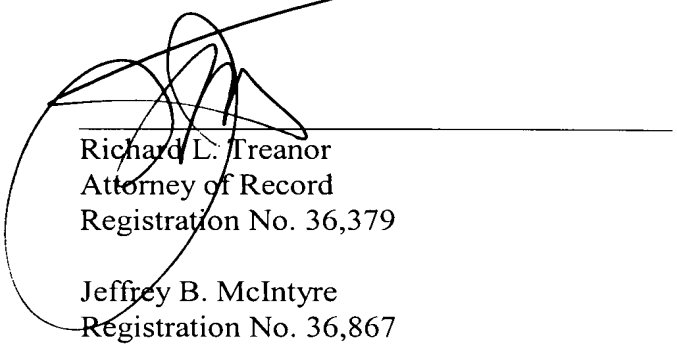
Accordingly, the present application satisfies the written description requirement.

III. **Conclusion**

In view of the above remarks and reasons explaining the patentable distinctness of the presently appealed claims over the applied prior art, Appellants request that the Examiner's rejections all be REVERSED.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Richard L. Treanor
Attorney of Record
Registration No. 36,379

Jeffrey B. McIntyre
Registration No. 36,867

Customer Number
22850

Tel. #: (703) 413-3000
Fax #: (703) 413-2220

APPENDIX I (CLAIMS)

Claim 1. (Previously Presented): A cleansing composition, comprising:

(1) at least one foaming surfactant, (2) at least 1 % by weight of at least one hydrophilic silica, relative to the total weight of the composition, and (3) at least one oxyalkylenated compound which is selected from the group consisting of oxyethylenated compounds and oxyethylenated/oxypropylenated compounds in a physiologically acceptable aqueous medium comprising at least 35 % by weight of water, relative to the total weight of the composition, wherein said oxyalkylenated compound is a thickening agent present in a composition thickening effective amount and is selected from the group consisting of

(a) polyethylene glycols having a number of ethylene oxide units greater than or equal to 800;

(b) polyethylene and/or polypropylene glycol esters having the formula:

$$RCOO\text{-}(EO)_m\text{-}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen;

(c) polyethylene glycol ethers having the formula

$$R\text{-}(EO)_m \text{---} (PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent,

independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the provisos that (i) R and R' are not simultaneously hydrogen, and (ii) where either R or R' is hydrogen, the other comprises an alkyl chain comprising 12 to 22 carbon atoms, an aryl group, or mixtures thereof;

(d) alkoxylated polyol fatty acid esters;

(e) alkoxylated polyol fatty alcohol ethers;

(f) alkoxylated glyceryl triesters of fatty acids;

(g) ethoxyethylenated urethane derivatives modified with alkyl chains; and

(h) mixtures thereof.

Claim 2: (Original): The composition according to Claim 1, which has a complex modulus G* ranging from 102 to 105 Pa and a loss angle ranging from 2°C to 45° C for frequencies ranging from 0.01 to 10 Hz.

Claim 3: (Original): The composition according to Claim 1, which comprises from 35 % to 95 % by weight of water relative to the total weight of the composition.

Claim 4: (Original): The composition according to Claim 1, wherein the amount of hydrophilic silica(s) ranges from 1% to 15% on an active material weight basis relative to the total weight of the composition.

Claim 5: (Original): The composition according to Claim 1, wherein the hydrophilic silica is selected from the group consisting of silicas of pyrogenic origin, of precipitated origin, and mixtures thereof.

Claim 6: (Original): The composition according to Claim 1, wherein the hydrophilic

silica is selected from the group consisting of silicas having a specific surface ranging from 30 to 500 m^2/g, a number-average particle size ranging from 3 to 50 nm and a compacted density ranging from 40 to 200 g/l.

Claim 7: (Original): The composition according to Claim 1, wherein the hydrophilic silica is a pyrogenic silica.

Claim 8: (Original): The composition according to Claim 7, wherein the hydrophilic silica consists of a particle coated with hydrophilic silica.

Claim 9: (Original): The composition according to Claim 1, wherein the amount of oxyalkylenated compound(s) ranges from 1 % to 20 % on an active material weight basis relative to the total weight of the composition.

Claim 11 (Previously Presented): A composition according to Claim 1, wherein at least one of the oxyalkylenated compound(s) have the formula:

$$RCOO\text{-}(EO)_m\text{-}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 12 (Previously Presented): A composition according to Claim 1, wherein at least one of the oxyalkylenated compound(s) have the formula:

$$R\text{-}(EO)_m\text{---}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-

hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen.

Claim 13: (Original): The composition according to Claim 1, wherein the foaming surfactant is selected from the group consisting of nonionic surfactants, anionic surfactants, amphoteric surfactants and zwitterionic surfactants, and mixtures thereof.

Claim 14: (Original): The composition according to Claim 1, wherein the amount of foaming surfactant(s) ranges from 2 % to 50 % on an active material weight basis relative to the total weight of the composition.

Claim 15: (Original): The composition according to Claim 11, wherein the foaming surfactant is selected from the group consisting of alkyl polyglucosides, maltose esters, polyglycerolated fatty alcohols, glucamine derivatives, carboxylates, amino acid derivatives, alkyl sulfates, alkyl ether sulfates, sulfonates, isethionates, taurates, sulfosuccinates, alkyl sulfoacetates, phosphates and alkyl phosphates, polypeptides, anionic alkyl polyglucoside derivatives, fatty acid soaps, betaines, N-alkylamidobetaines and derivatives thereof, glycine derivatives, sultaines, alkyl polyaminocarboxylates and alkylamphoacetates, and mixtures thereof.

Claim 16: (Original): The composition according to Claim 1, which further comprises at least one solvent selected from the group consisting of alcohols comprising from 1 to 6 carbon atoms, polyols and mixtures thereof.

Claim 17: (Original): A method of treating the skin, the eyes, the scalp and/or the hair, comprising:

applying the composition of Claim 1 to the skin, the eyes, the scalp and/or the hair

thereby cleansing and/or removing make-up from the skin, the eyes, the scalp and/or the hair.

Claim 18: (Original): A method of treating greasy skin, comprising:

applying the composition of Claim 1 to the skin, thereby removing grease from the skin.

Claim 19: (Original): A method of disinfecting the skin and/or the scalp, comprising:

applying the composition of Claim 1 to the skin and/or the scalp, thereby disinfecting the skin and/or the scalp.

Claim 20: (Original): A method of cleansing the skin, the eyes, the scalp and/or the hair, comprising:

applying the composition of Claim 1 to the skin, the eyes, the scalp and/or the hair in the presence of water thereby forming a lather; and

removing the lather containing soiling residues by rinsing the lather from the skin, the eyes, the scalp and/or the hair with water.

Claim 21: (Original): A cosmetic mask, comprising:

an applied composition of Claim 1 as a mask on the skin of the face.

Claim 23. (Previously Presented): The composition according to Claim 1, wherein the thickening agent present in a composition thickening effective amoun is selected from the group consisting of

(a) polyethylene and/or polypropylene glycol esters having the formula:

$$RCOO\text{-}(EO)_m\text{-}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent,

independently of each other, hydrogen or a saturated or unsaturated, linear or

branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the proviso that R and R' are not simultaneously hydrogen;

(b) polyethylene glycol ethers having the formula

$$R\text{-}(EO)_m\text{---}(PO)_n\text{-}R'$$

wherein $0 < m \leq 300$ and $0 \leq n \leq 300$ and $m + n \geq 6$, R and R' represent, independently of each other, hydrogen or a saturated or unsaturated, linear or branched, hydroxylated or non-hydroxylated alkyl chain containing from 1 to 30 carbon atoms, or an aryl chain, with the provisos that (i) R and R' are not simultaneously hydrogen, and (ii) where either R or R' is hydrogen, the other comprises an alkyl chain comprising 12 to 22 carbon atoms, an aryl group, or mixtures thereof;

(c) alkoxylated polyol fatty acid esters;

(d) alkoxylated polyol fatty alcohol ethers;

(e) alkoxylated glyceryl triesters of fatty acids;

(f) ethoxyethylenated urethane derivatives modified with alkyl chains; and

(g) mixtures thereof.

APPENDIX II (EVIDENCE)

1. CTFA cosmetics handbook (Vol. 2, pp. 969-976) (2000).

APPENDIX III
(RELATED PROCEEDINGS APPENDIX)

None.

International Cosmetic Ingredient Dictionary and Handbook

Eighth Edition
2000

Editors
John A. Wenninger
Renae C. Canterbery
G. N. McEwen, Jr., Ph.D., J.D.

Volume 2

Published by
The Cosmetic, Toiletry, and Fragrance Association
1101 17th Street, NW, Suite 300
Washington, D.C. 20036-4702

PECTIN

CAS No. 9000-69-5 **EINECS No.** 232-553-0

Definition: Pectin is a purified carbohydrate product obtained from the dilute acid extract of the inner portion of the rind of citrus fruits or from apple pomace. It consists chiefly of partially methoxylated polygalacturonic acids. In the United States, Pectin may be used as an active ingredient in OTC drug products. When used as an active drug ingredient, the established name is *Pectin. See "Regulatory and Ingredient Use Information," regarding the labeling names for U.S. OTC Drug Ingredients in Volume 1, Introduction, Part A.*

Information Sources: AUS, BRA, 21CFR135.140, 21CFR145, 21CFR150, 21CFR150.110, 21CFR150.140, 21CFR150.141, 21CFR150.160, 21CFR150.161, 21CFR173.385, 21CFR184.1588, 21CFR310.545, 27CFR21.141, FCC, JCIC, JCLS, JSQI, MAR, MI-12(7194), OTC-I-OH, TSCA, USAN, USD, USP XXIII

Chemical Class: Gums, Hydrophilic Colloids and Derivatives

Functions: Binder; Emulsion Stabilizer; Oral Health Care Drug; Viscosity Increasing Agent - Aqueous

Reported Product Categories: Shampoos (Non-coloring); Permanent Waves; Hair Conditioners; Tonics, Dressings, and Other Hair Grooming Aids; Hair Preparations (Non-coloring), Misc.

Technical/Other Name:
Citrus Pectin

Trade Names:
Genu (Hercules)
Pectins (Herbstreith & Fox)

Trade Name Mixture:
Kollosin - RS (Kramer)

PEG-4

CAS Nos. 25322-68-3 (generic), 112-60-7 **EINECS Nos.** 203-989-9

Empirical Formula:
$C_8H_{18}O_5$

Definition: PEG-4 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 4.

Information Sources: BAN, 21CFR73.1, 21CFR73.2180, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3520, 21CFR178.3750, CTFA S, FCC, JAN, JCLS, JSCI, MAR, MI-12(7729), NF XVIII, ROM, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Categories: Body and Hand Preparations (Excluding Shaving Preparations); Aftershave Lotions; Skin Care Preparations, Misc.; Hair Conditioners; Shampoos (Non-coloring); Deodorants (Underarm)

Technical/Other Names:
Ethanol, 2,2'-[Oxybis(2,1-Ethanediyloxy)Bis-2,2'-[Oxybis(2,1-Ethanediyloxy)]Bisethanol
Polyethylene Glycol 200
Polyoxyethylene (4)
Tetraethylene Glycol

Trade Names:
Calgene PEG 200 (Calgene)
CARBOWAX PEG 200 (Union Carbide)
DePEG 200 (DeForest)
Hetoxide PEG-200 (Heterene)
Lipoxol 200 MED (Condea Chemie)
Macrogol 200 (NOF)
Pluracol E 200 (BASF)
Polyglycol E-200 (Dow Chemical)
Polyglykol 200 USP (Clariant GmbH)
Sabopeg 200 (Sabo)
Unipeg-200 X (Universal Preserv-A-Chem)
Upiwax 200 (Universal Preserv-A-Chem)

Trade Name Mixtures:
Eyebright Extract HS 2727 G (Grau)
Hexatrate (Vevy)

PEG-6

CAS Nos. 25322-68-3 (generic), 2615-15-8 **EINECS Nos.** 220-045-1

Empirical Formula:
$C_{12}H_{26}O_7$

Definition: PEG-6 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 6.

Information Sources: BAN, BP, BPC, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3570, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, CTFA S, CZE, FCC, JAN, JCLS, JSCI, MAR, MI-12(7729), NF XVIII, OTC-I-OP, ROM, TSCA, USAN, USD

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Categories: Bath Soaps and Detergents; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Suntan Gels, Creams, and Liquids; Skin Care Preparations, Misc.; Face and Neck Preparations (Excluding Shaving Preparations); Moisturizing Preparations; Eye Makeup Preparations, Misc.; Paste Masks (Mud Packs); Body and Hand Preparations (Excluding Shaving Preparations)

Technical/Other Names:
Hexaethylene Glycol
3,6,9,12,15-Pentaoxaheptadecane-1,17-Diol
Polyethylene Glycol 300
Polyoxyethylene (6)

Trade Names:
Calgene PEG 300 (Calgene)
CARBOWAX PEG 300 (Union Carbide)
DePEG 300 (DeForest)
Hetoxide PEG-300 (Heterene)
Lipoxol 300 MED (Condea Chemie)
Lutrol E300 (BASF)
Macrogol 300 (NOF)
Pluracol E 300 (BASF)
Polyglycol E-300 (Dow Chemical)
Polyglykol 300 (Clariant GmbH)
Sabopeg 300 (Sabo)
Upiwax 300 (Universal Preserv-A-Chem)

Trade Name Mixtures:
AZG-7190 PEG-6 Solution (Summit Research Labs)
Calgene PEG 540 (Calgene)
Calgene 150-S (Calgene)
CARBOWAX PEG 540 Blend (Union Carbide)
Cellulinol (Prod'Hyg)
Lanobase S.E. (Lanaetex)
Lanogen 1500 (Clariant GmbH)
Lipoxol 550 MG MED (Condea Chemie)
Pegosperse 1500 DL (Lonza Inc./Lonza Ltd.)
Pegosperse 1500 DO (Lonza Inc./Lonza Ltd.)
Pegosperse 1500 MS (Lonza Inc./Lonza Ltd.)
SWERTIALL (Ichimaru Pharcos)
Unipeg-1500 X (Universal Preserv-A-Chem)
Uniwax 1450 (Universal Preserv-A-Chem)
Vegeles SR (Serobiologiques)

PEG-7

Definition: PEG-7 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 7.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (7)
Polyoxyethylene (7)

Trade Name:
Jeechem 300 (Jeen)

PEG-8

CAS Nos. 25322-68-3 (generic), 5117-19-1 **EINECS Nos.** 225-856-4

Empirical Formula:
$C_{16}H_{34}O_9$

Definition: PEG-8 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 8.

Information Sources: BAN, BRA, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, 21CFR181.22, 21CFR181.30, CIR: [SQ] JACT-12(5)1993, CTFA S, FCC, HUN, JAN, JCLS, JSCI, MAR, MI-12(7729), NF XVIII, NFJ, OTC-I-OP, PN, POL, ROM, TSCA, USAN, USD

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Categories: Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Deodorants (Underarm); Foundations; Moisturizing Preparations; Body and Hand Preparations (Excluding Shaving Preparations); Skin Care Preparations, Misc.; Makeup Bases; Bath Soaps and Detergents; Hair Conditioners; Eye Makeup Removers; Night Skin Care Preparations; Bubble Baths; Skin Fresheners; Bath Preparations, Misc.; Face and Neck Preparations (Excluding Shaving Preparations); Paste Masks (Mud Packs); Lipsticks; Shaving Cream (Aerosol, Brushless and Lather)

Technical/Other Names:
3,6,9,12,15,18,21-Heptaoxatricosane-1,23-diol
Octaethylene Glycol
Polyethylene Glycol 400
Polyoxyethylene (8)

Trade Names:
Calgene PEG 400 (Calgene)
CARBOWAX PEG 400 (Union Carbide)
DePEG 400 (DeForest)
Jeechem 400 (Jeen)
Lipoxol 400 MED (Condea Chemie)
Lutrol E400 (BASF)
Macrogol 400 (NOF)
Pluracol E 400 (BASF)
Polyglycol E-400 (Dow Chemical)
Polyglykol 400 (Clariant GmbH)
Prochem 400 (Protameen)
Renex PEG 400 (Uniqema Americas)
Sabopeg 400 (Sabo)
Sympatens-PEG/400 (Kolb)
Unipeg-400 X (Universal Preserv-A-Chem)
Upiwax 400 (Universal Preserv-A-Chem)

Trade Name Mixtures:
Afron 22 (Vevy)
Afron-A (Vevy)
Afron-LS (Vevy)
Afron-N (Vevy)
Bio-Bustyl (Sederma)
Biopeptide-EL (Sederma)
Carbossalina (Vevy)
Ceramide A2 (Sederma)
Ceramide 2 Sol 2% (Sederma)
Dermocide L (Fabriquimica)
Hair Complex Aquosum (Chemisches Laboratorium)
JM ActiCare Plus (Johnson Matthey)
Kalixide Idrata (Vevy)
Kava Kava (Sederma)
Melibion (Vevy)
Osmohair (Sederma)
Oxynex K Liquid (Rona/EM Industries)
Polysol GL (Polygon)
Seromarine (Sederma)
Tensioplastidina Avena (Vevy)
Vegewhite (Wackherr)
Vitaderm (Fabriquimica)

PEG-9

CAS Nos. 25322-68-3 (generic), 3386-18-3
EINECS Nos. 222-206-1

Empirical Formula:
$C_{18}H_{38}O_{10}$

Definition: PEG-9 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 9.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Technical/Other Names:
Nonaethylene Glycol
3,6,9,12,15,18,21,24-Octaoxahexacosane-1,26-diol
Polyethylene Glycol 450
Polyoxyethylene (9)

Trade Names:
Rhodasurf PEG-400 (Rhodia Inc.)
Sipol PEG 400 (Specialty Industrial)

PEG-10

CAS Nos. 25322-68-3 (generic), 5579-66-8
EINECS Nos. 226-962-3

Empirical Formula:
$C_{20}H_{42}O_{11}$

Definition: PEG-10 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 10.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Technical/Other Names:
Decaethylene Glycol
3,6,9,12,15,18,21,24,27-Nonaoxanonacosane-1, 29-diol
Polyethylene Glycol 500
Polyoxyethylene (10)

PEG-12

CAS Nos. 25322-68-3 (generic), 6790-09-6
EINECS Nos. 229-859-1

Empirical Formula:
$C_{24}H_{50}O_{13}$

Definition: PEG-12 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 12.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, JAN, JCLS, JSCI, MI-12(7729), NF XVIII, ROM, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Categories: Moisturizing Preparations; Bath Soaps and Detergents

Technical/Other Names:
Dodecaethylene Glycol
Polyethylene Glycol 600
Polyoxyethylene (12)
3,6,9,12,15,18,21,24,27,30,33-Undecaoxapentatriacontane-1, 35-Diol
3,6,9,12,15,18,21,24,27,30,33-Undecaoxapentatricontane-1, 35-diol

Trade Names:
Calgene PEG 600 (Calgene)

CARBOWAX PEG 600 (Union Carbide)
DePEG 600 (DeForest)
Jeechem 600 (Jeen)
Lipoxol 600 MED (Condea Chemie)
Macrogol 600 (NOF)
Norfox E-600 (Norman, Fox & Co.)
Pluracol E 600 (BASF)
Polyglycol E-600 (Dow Chemical)
Polyglykol 600 (Clariant GmbH)
Polyglykol 6000 (Clariant GmbH)
Renex PEG 600 (Uniqema Americas)
Sabopeg 600 (Sabo)
Sipol PEG-600 (Specialty Industrial)
Unipeg-600 (Universal Preserv-A-Chem)
Upiwax 600 (Universal Preserv-A-Chem)

PEG-14

CAS No.: 25322-68-3 (generic)

Definition: PEG-14 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 14.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Category: Foot Powders and Sprays

Technical/Other Names:
Polyethylene Glycol (14)
Polyoxyethylene (14)

Trade Name:
Rhodasurf PEG-600 (Rhodia Inc.)

PEG-16

CAS No.: 25322-68-3 (generic)

Definition: PEG-16 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 16.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Category: Body and Hand Preparations (Excluding Shaving Preparations)

Technical/Other Names:
Polyethylene Glycol (16)
Polyoxyethylene (16)

Trade Names:
Lipoxol 800 MED (Condea Chemie)
Polyglykol 800 (Clariant GmbH)
Renex PEG 800 (Uniqema Americas)

PEG-18

CAS No.: 25322-68-3 (generic)

Definition: PEG-18 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 18.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (18)
Polyoxyethylene (18)

Trade Name:
CARBOWAX PEG 900 (Union Carbide)

PEG-20

CAS No.: 25322-68-3 (generic)

Definition: PEG-20 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 20.

Information Sources: BAN, 21CFR73.1001, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA S, FCC, JAN, JCLS, JSCI, MI-12(7729), NF XVIII, ROM, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Humectant; Solvent

Reported Product Categories: Foundations; Moisturizing Preparations; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Hair Wave Sets; Personal Cleanliness Products, Misc.

Technical/Other Names:
Polyethylene Glycol 1000
Polyoxyethylene (20)

Trade Names:
Calgene PEG 1000 (Calgene)
CARBOWAX PEG 1000 (Union Carbide)
Lipoxol 1000 MED (Condea Chemie)
Macrogol 1000 (NOF)
Pluracol E 1000 (BASF)
Polyglycol E-1000 (Dow Chemical)
Polyglykol 1000 (Clariant GmbH)
Renex PEG 1000 (Uniqema Americas)
Sabopeg 1000 (Sabo)
Sipol PEG 1000 (Specialty Industrial)
Unipeg-1000 X (Universal Preserv-A-Chem)
Upiwax 1000 (Universal Preserv-A-Chem)

Trade Name Mixtures:
Suncaps 664 (SunSmart)
Suncaps 797 (SunSmart)
Suncaps 903 (SunSmart)

PEG-32

CAS No.: 25322-68-3 (generic)

Definition: PEG-32 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 32.

Information Sources: BAN, BP, BPC, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, CTFA S, CZE, FCC, HUN, JAN, JCIC, JCLS, JSQI, MAR, MI-12(7729), NF XVIII, TSCA, USAN, USD

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Reported Product Categories: Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Skin Care Preparations, Misc.; Dentifrices (Aerosol, Liquid, Pastes and Powders); Moisturizing Preparations; Mascara; Face and Neck Preparations (Excluding Shaving Preparations); Paste Masks (Mud Packs)

Technical/Other Names:
Polyethylene Glycol 1540
Polyoxyethylene (32)

Trade Names:
Calgene PEG 1450 (Calgene)
CARBOWAX PEG 1450 (Union Carbide)
Jeechem 1450 NF (Jeen)
Lipoxol 1550 MED (Condea Chemie)
Lutrol E1500 (BASF)

Macrogol 1500 (NOF)
Macrogol 1540 (NOF)
Pluracol E 1450 (BASF)
Polyglycol E1450 (Dow Chemical)
Polyglykol 1500 (Clariant GmbH)
Protachem 1450 NF (Protameen)
Renex PEG 1500 (Uniqema Americas)
Sabopeg 1500 (Sabo)
Sympatens-PEG/1500 G (Kolb)
Unipeg-1540 X (Universal Preserv-A-Chem)

Trade Name Mixtures:
Calgene PEG 540 (Calgene)
Calgene 150-S (Calgene)
CARBOWAX PEG 540 Blend (Union Carbide)
Lanobase S.E. (Lanaetex)
Lanogen 1500 (Clariant GmbH)
Lipoxol 550 MG MED (Condea Chemie)
Pegosperse 1500 DL (Lonza Inc./Lonza Ltd.)
Pegosperse 1500 DO (Lonza Inc./Lonza Ltd.)
Pegosperse 1500 MS (Lonza Inc./Lonza Ltd.)
SWERTIALL (Ichimaru Pharcos)
Unipeg-1500 X (Universal Preserv-A-Chem)
Uniwax 1450 (Universal Preserv-A-Chem)
Vegeles Phyto Filtre (Serobiologiques)

PEG-40

CAS No.: 25322-68-3 (generic)

Definition: PEG-40 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 40.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR176.200, 21CFR178.3750, 21CFR178.3910, JAN, JCIC, JCLS, MI-12(7729), NF XVIII, ROM, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol 2000
Polyoxyethylene (40)

Trade Names:
Lipoxol 2000 MED (Condea Chemie)
Pluracol E 2000 (BASF)
Polyglykol 2000 (Clariant GmbH)

PEG-45

Definition: PEG-45 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 45.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (45)
Polyoxyethylene (45)

Trade Name:
Toho PEG#2000 (Toho)

PEG-55

Definition: PEG-55 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 55.

Information Sources: BAN, JAN, NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (55)
Polyoxyethylene (55)

Trade Names:
Jeechem 3350 NF (Jeen)
Renex PEG 3350 (Uniqema Americas)

PEG-60

CAS No.: 25322-68-3 (generic)

Definition: PEG-60 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 60.

Information Sources: BAN, JAN, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol 3000
Polyoxyethylene (60)

Trade Names:
Lipoxol 3000 MED (Condea Chemie)
Polyglykol 3000 (Clariant GmbH)

PEG-75

CAS No.: 25322-68-3 (generic)

Definition: PEG-75 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 75.

Information Sources: BAN, BP, BPC, BRA, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, CTFA S, FCC, HUN, JAN, JCLS, JSCI, MAR, MI-12(7729), NF XVIII, NFJ, PN, POL, ROM, TSCA, USAN, USD

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Reported Product Categories: Skin Care Preparations, Misc.; Moisturizing Preparations; Cleansing Products (Cold Creams, Cleansing Lotions, Liquids and Pads); Paste Masks (Mud Packs)

Technical/Other Names:
Polyethylene Glycol 4000
Polyoxyethylene (75)

Trade Names:
Calgene PEG 3350 (Calgene)
CARBOWAX PEG 3350 (Union Carbide)
Pluracol E 4000 (BASF)
Polyglykol 3350 (Clariant GmbH)
Renex PEG 4000 (Uniqema Americas)
Sabopeg 4000 (Sabo)
Sympatens-PEG/4000 G (Kolb)
Upiwax 3350 (Universal Preserv-A-Chem)

Trade Name Mixture:
Sun Caps C (SunSmart)

PEG-90

CAS No.: 25322-68-3

Definition: PEG-90 is the polymer of ethylene oxide that conforms to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 90.

Information Sources: BAN, INN, JAN, NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (90)
Polyoxyethylene (90)

Trade Names:
Lipoxol 4000 MED (Condea Chemie)

Lutrol E4000 Prill (BASF)
Macrogol 4000 (NOF)
Polyglycol E-4000 (Dow Chemical)
Polyglykol 4000 (Clariant GmbH)
Unipeg-4000 X (Universal Preserv-A-Chem)

PEG-100

CAS No.: 25322-68-3 (generic)

Definition: PEG-100 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 100.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (100)
Polyoxyethylene (100)

Trade Names:
CARBOWAX PEG 4600 (Union Carbide)
Polyglycol E-4500 (Dow Chemical)

PEG-135

CAS No.: 25322-68-3 (generic)

Definition: PEG-135 is the polymer of ethylene oxide that conforms to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 135.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.105, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (135)
Polyoxyethylene (135)

Trade Names:
Lipoxol 6000 MED (Condea Chemie)
Macrogol 6000 (NOF)

PEG-150

CAS No.: 25322-68-3 (generic)

Definition: PEG-150 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 150.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR177.2420, 21CFR178.3750, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, CTFA S, FCC, JAN, JCLS, JSCI, MAR, MI-12(7729), NF XVIII, OTC-I-OP, PN, ROM, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Reported Product Category: Bath Oils, Tablets, and Salts

Technical/Other Names:
Polyethylene Glycol 6000
Polyoxyethylene (150)

Trade Names:
Lutrol E 6000 Prill (BASF)
Pluracol E 8000 (BASF)
Renex PEG 6000 (Uniqema Americas)
Sabopeg 6000 (Sabo)
Unipeg-6000 X (Universal Preserv-A-Chem)

Trade Name Mixture:
Sun Caps C (SunSmart)

PEG-180

CAS No.: 25322-68-3 (generic)

Definition: PEG-180 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 180.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, JAN, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (180)
Polyoxyethylene (180)

Trade Names:
Calgene PEG 8000 (Calgene)
CARBOWAX PEG 8000 (Union Carbide)
Polyglycol E-8000 (Dow Chemical)
Polyglykol 8000 (Clariant GmbH)
Renex PEG 8000 (Uniqema Americas)
Upiwax 8000 (Universal Preserv-A-Chem)

Trade Name Mixture:
Aqua-Thik (Guardian)

PEG-200

CAS No.: 25322-68-3 (generic)

Definition: PEG-200 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 200.

Information Sources: BAN, 21CFR172.210, 21CFR172.770, 21CFR172.820, 21CFR173.310, 21CFR173.340, 21CFR175.300, 21CFR178.3750, 21CFR178.3910, CTFA D, FCC, JAN, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol 9000
Polyoxyethylene (200)

Trade Name Mixtures:
Germinol (Dr. Gerhard Steidl)
Harmonic ASP (Dr. Gerhard Steidl)
Hexatrate Al-Free (Vevy)
Jonat AS (Dr. Gerhard Steidl)

PEG-220

Definition: PEG-220 is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 220.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (220)
Polyoxyethylene (220)

Trade Name:
Polyglykol 10000 (Clariant GmbH)

PEG-240

CAS No.: 25322-68-3 (generic)

Definition: PEG-240 is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 240.

Information Sources: 21CFR172.770, 21CFR175.300, 21CFR178.3910, JCIC, JCLS, MI-12(7729)

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Humectant; Solvent

Technical/Other Names:
Polyethylene Glycol (240)
Polyethylene Glycol 11000
Polyoxyethylene (240)

Trade Names:
Lipoxol 12000 (Condea Chemie)
Polyglykol 12000 (Clariant GmbH)

PEG-350

CAS No.: 25322-68-3 (generic)

Definition: PEG-350 is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 350.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JCLS, JSCI, MI-12(7729), TSCA

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Solvent

Technical/Other Names:
Polyethylene Glycol 20000
Polyoxyethylene (350)

Trade Names:
Lipoxol 20000 (Condea Chemie)
Polyglykol 20000 (Clariant GmbH)
Upiwax 20000 (Universal Preserv-A-Chem)

PEG-400

Definition: PEG-400 is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 400.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Solvent

Technical/Other Names:
Polyethylene Glycol (400)
Polyoxyethylene (400)

PEG-500

Definition: PEG-500 is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 500.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Solvent

Technical/Other Names:
Polyethylene Glycol (500)
Polyoxyethylene (500)

Trade Name:
Toho PEG#20000 (Toho)

PEG-800

Definition: PEG-800 is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 800.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Anticaking Agent; Binder; Humectant; Plasticizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
Polyethylene Glycol (800)
Polyoxyethylene (800)

Trade Names:
Polyglykol 35000 (Clariant GmbH)
Polyglykol 35000 S (Clariant GmbH)

PEG-2M

CAS No.: 25322-68-3 (generic)

Definition: PEG-2M is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 2000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-2000
Polyethylene Glycol (2000)
Polyoxyethylene (2000)

Trade Name:
Polyox WSR N-10 (Amerchol)

Trade Name Mixture:
Spectraveil AQ (Uniqema Solaveil)

PEG-5M

CAS No.: 25322-68-3 (generic)

Definition: PEG-5M is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 5000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Reported Product Category: Shampoos (Non-coloring)

Technical/Other Names:
PEG-5000
Polyethylene Glycol (5000)
Polyoxyethylene (5000)

Trade Names:
Polyox WSR N-80 (Amerchol)
RITA PEO-1 (RITA)

PEG-7M

CAS No.: 25322-68-3 (generic)

Definition: PEG-7M is the polymer of ethylene oxide that conforms generally to the formula:

$H(OCH_2CH_2)_nOH$

where n has an average value of 7000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-7000
Polyethylene Glycol (7000)
Polyoxyethylene (7000)

Trade Name:
Polyox WSR N-750 (Amerchol)

PEG-9M

CAS No.: 25322-68-3 (generic)

Definition: PEG-9M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 9000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-9000
Polyethylene Glycol (9000)
Polyoxyethylene (9000)

Trade Name:
RITA PEO-2 (RITA)

PEG-14M

CAS No.: 25322-68-3 (generic)

Definition: PEG-14M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 14000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Reported Product Categories: Shaving Preparations, Misc.; Shampoos (Non-coloring); Shaving Cream (Aerosol, Brushless and Lather)

Technical/Other Names:
PEG-14000
Polyethylene Glycol (14000)
Polyoxyethylene (14000)

Trade Names:
Polyox WSR-205 (Amerchol)
Polyox WSR N-3000 (Amerchol)

PEG-20M

CAS No.: 25322-68-3 (generic)

Definition: PEG-20M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 20000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, CIR: [SQ] JACT-12(5)1993, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-20000
Polyethylene Glycol (20000)
Polyoxyethylene (20000)

Trade Name Mixture:
Vegeles SR (Serobiologiques)

PEG-23M

CAS No.: 25322-68-3 (generic)

Definition: PEG-23M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 23000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-23000
Polyethylene Glycol (23000)
Polyoxyethylene (23000)

Trade Names:
Polyox WSR N-12K (Amerchol)
RITA PEO-3 (RITA)

PEG-25M

CAS No.: 25322-68-3 (generic)

Definition: PEG-25M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has a value of 25000.

Information Sources: JSQI

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-25000
Polyethylene Glycol (25000)
Polyoxyethylene (25000)

PEG-45M

CAS No.: 25322-68-3 (generic)

Definition: PEG-45M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 45000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Reported Product Category: Shampoos (Non-coloring)

Technical/Other Names:
PEG-45000
Polyethylene Glycol (45000)
Polyoxyethylene (45000)

Trade Names:
Polyox WSR N-60K (Amerchol)
RITA PEO-8 (RITA)

PEG-90M

CAS No.: 25322-68-3 (generic)

Definition: PEG-90M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 90000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729), NF XVIII, TSCA, USAN

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-90000
Polyethylene Glycol (90000)
Polyoxyethylene (90000)

Trade Names:
Polyox WSR-301 (Amerchol)
RITA PEO-18 (RITA)

PEG-115M

CAS No.: 25322-68-3 (generic)

Definition: PEG-115M is the polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 115000.

Information Sources: 21CFR172.770, 21CFR173.310, 21CFR175.300, 21CFR178.3910, JSQI, MI-12(7729)

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
PEG-115000
Polyethylene Glycol (115000)
Polyoxyethylene (115000)

PEG-160M

Definition: PEG-160M is a polymer of ethylene oxide that conforms generally to the formula:

$$H(OCH_2CH_2)_nOH$$

where n has an average value of 160000.

Chemical Classes: Alkoxylated Alcohols; Polymeric Ethers

Functions: Binder; Emulsion Stabilizer; Viscosity Increasing Agent - Aqueous

Technical/Other Names:
Polyethylene Glycol (160000)
Polyoxyethylene (160000)

Trade Name:
RITA PEO-27 (RITA)

PEG-6 ALMOND GLYCERIDES

Definition: PEG-6 Almond Glycerides is a polyethylene glycol derivative of the mono- and diglycerides from almond oil with an average of 6 moles of ethylene oxide.

Chemical Classes: Alkoxylated Alcohols; Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (6) Almond Glycerides
Polyoxyethylene (6) Almond Glycerides

Trade Name:
ESTOL 3657 (Uniqema)

PEG-20 ALMOND GLYCERIDES

CAS No.: 124046-50-0

Definition: PEG-20 Almond Glycerides is a polyethylene glycol derivative of the mono- and diglycerides from almond oil with an average of 20 moles of ethylene oxide.

Chemical Classes: Alkoxylated Alcohols; Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol 1000 Almond Glycerides
Polyoxyethylene (20) Almond Glycerides

Trade Names:
Crovol A40 (Croda Oleochemicals)
Crovol A-40 (Croda, Inc.)

PEG-35 ALMOND GLYCERIDES

CAS No.: 124046-50-0

Definition: PEG-35 Almond Glycerides is a polyethylene glycol derivative of the mono- and diglycerides derived from almond oil with an average of 35 moles of ethylene oxide.

Chemical Class: Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (35) Almond Glycerides
Polyoxyethylene (35) Almond Glycerides

Trade Name:
Sympatens-TAL/350 (Kolb)

PEG-60 ALMOND GLYCERIDES

CAS No.: 124046-50-0

Definition: PEG-60 Almond Glycerides is a polyethylene glycol derivative of the mono- and diglycerides from almond oil with an average of 60 moles of ethylene oxide.

Chemical Classes: Alkoxylated Alcohols; Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Reported Product Categories: Skin Fresheners; Shampoos (Non-coloring)

Technical/Other Names:
Polyethylene Glycol 3000 Almond Glycerides
Polyoxyethylene (60) Almond Glycerides

Trade Names:
Crovol A70 (Croda Oleochemicals)
Crovol A-70 (Croda, Inc.)

PEG-11 AVOCADO GLYCERIDES

CAS No.: 103819-44-9 (generic)

Definition: PEG-11 Avocado Glycerides is a polyethylene glycol derivative of mono- and diglycerides from avocado oil with an average of 11 moles of ethylene oxide.

Chemical Classes: Alkoxylated Alcohols; Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (11) Avocado Glycerides
Polyoxyethylene (11) Avocado Glycerides

Trade Names:
Avocado Oil W (Cosmetochem)
Oxypon 365 (Zschimmer & Schwarz)

PEG-14 AVOCADO GLYCERIDES

CAS No.: 103819-44-9 (generic)

Definition: PEG-14 Avocado Glycerides is a polyethylene glycol derivative of the mono- and diglycerides derived from avocado oil with an average of 14 moles of ethylene oxide.

Chemical Classes: Alkoxylated Alcohols; Glyceryl Esters and Derivatives

Functions: Skin-Conditioning Agent - Emollient; Surfactant - Emulsifying Agent

Technical/Other Names:
Polyethylene Glycol (14) Avocado Glycerides
Polyoxyethylene (14) Avocado Glycerides

Trade Name:
Crovol AV40G (Croda Oleochemicals)

PEG-11 BABASSU GLYCERIDES

Definition: PEG-11 Babassu Glycerides is a polyethylene glycol derivative of the mono- and